

Figure 1

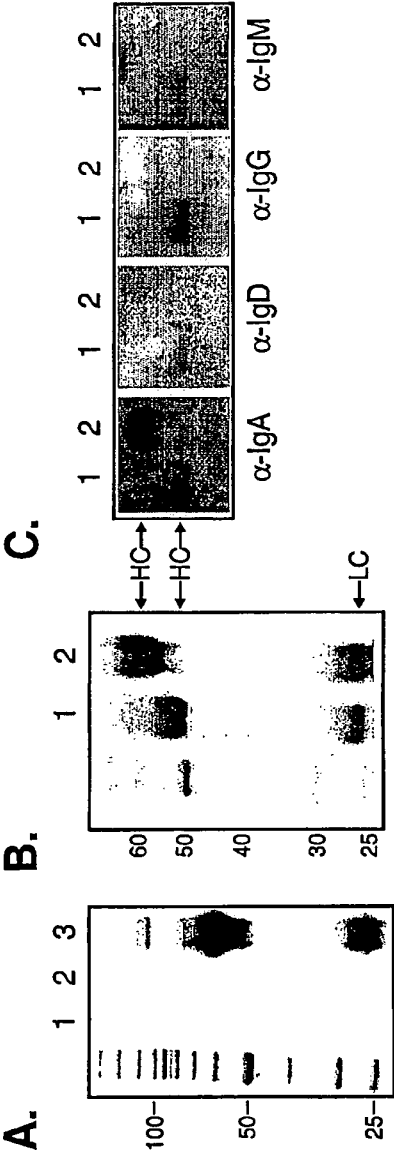
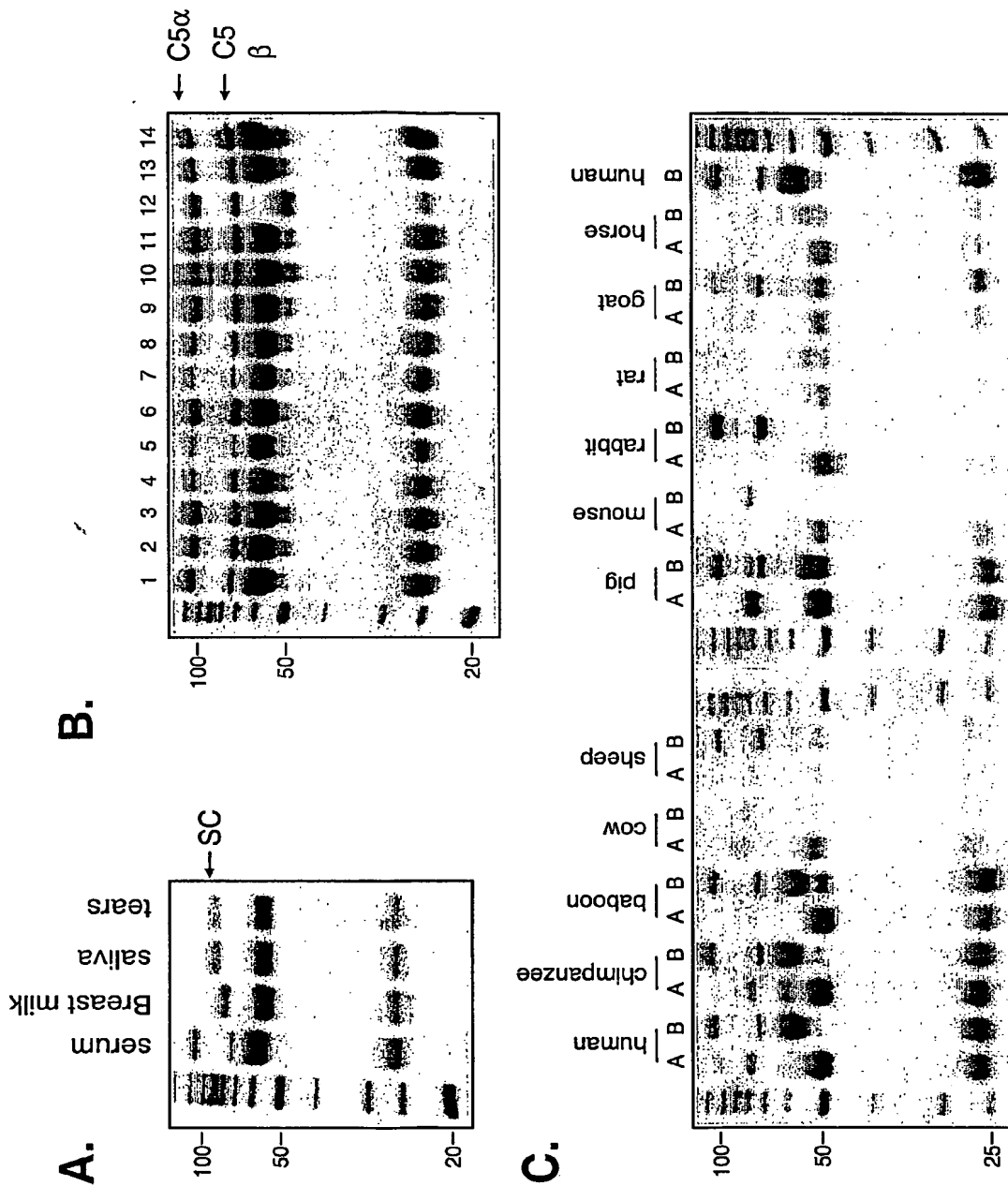


Figure 2



### Figure 3

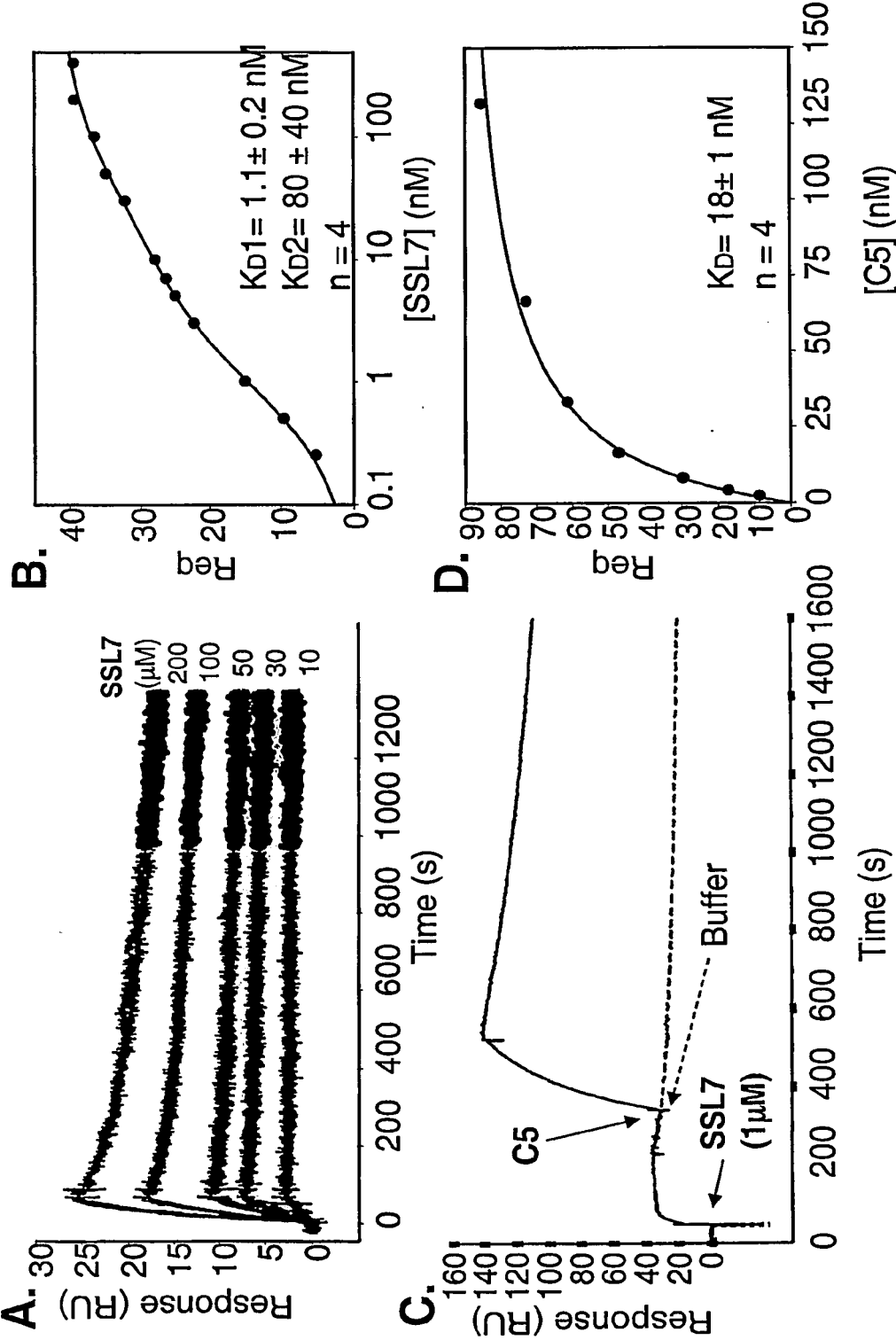


Figure 4

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**A.**

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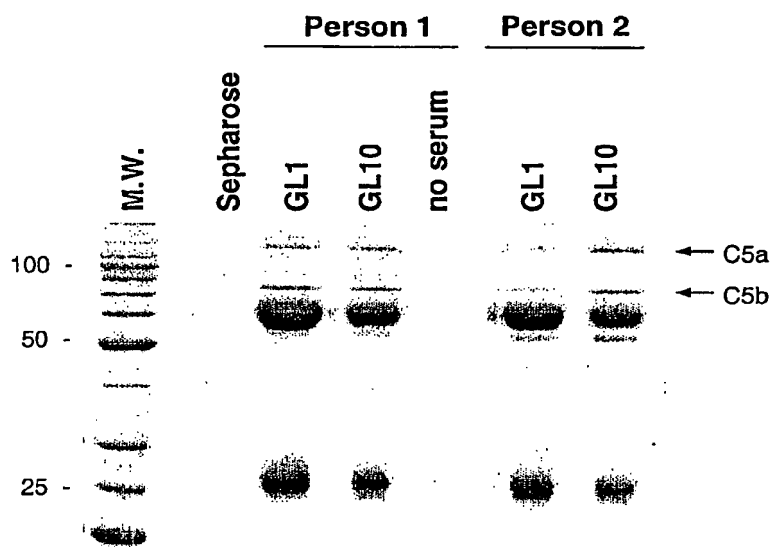
SSL7_GL10      KEKQERVQHLYDIKDLHRYYSSESFEFSNISGKVENYNGSNVVRFNQDQGNHQLFLLGED
SSL7_GL1      KEKQERVQHLYDIKDLHRYYSSESFEFSNISGKVENYNGSNVVRFNQEKQNHQLFLLGED
SSL7_MW2      KEKQERVQHLYDIKDLHRYYSSESFEFSNISGKVENYNGSNVVRFNQENQNHQLFLLSGKD
SSL7_NCTC8325 KEKQERVQHLYDIKDLHRYYSSESFEFSNISGKVENYNGSNVVRFNQENQNHQLFLLGKD
SSL7_Mu50     KEKQERVQHLYDIKDLRYYSSESFEFSNISGKVENYNGSNVVRFNQEKQNHQLFLLGKD
SSL7_N315     KEKQERVQHLYDIKDLRYYSSESFEFSNISGKVENYNGSNVVRFNQEKQNHQLFLLGKD
SSL7_NCTC6571 AEKQERVQHLHDIRDLHRYYSSESFEFSNVSNGKVENYNGSNVVRFNPKDQNHQLFLLGKD
                *****;*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*

SSL7_GL10      KAKYKQGLEGQNVFVVKELIDPNGRLSTVGGVTKKNNQSSETNTPLFVKVKYGGNLDASI
SSL7_GL1      KAKYKQGLQGQDVFVVKELIDPNGRLSTVGGVTKKNNQSSETNTPLFVKNKLDGGLDASN
SSL7_MW2      KDKYKEGLEGQNVFVVKELIDPNGRLSTVGGVTKKNNQSSETNTPLFIKKVYGGNLDASI
SSL7_NCTC8325 KEKYKEGIEGKDVVVKELIDPNGRLSTVGGVTKKNNKSSETNTPLFVNKVYGGNLDASI
SSL7_Mu50     KDKYKQGLEGQNVFVVKELIDPNGRLSTVGGVTKKNNKSSETNTPLFVNKVYGGNLDASI
SSL7_N315     KDKYKQGLEGQNVFVVKELIDPNGRLSTVGGVTKKNNKSSETNTPLFVNKVYGGNLDASI
SSL7_NCTC6571 KEQYKEGLQGQNVFVVKELIDPNGRLSTVGGVTKKNNKTSSETNTPLFVNKVNGBDLDAASI
                *~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*

SSL7_GL10      ESFSINKEEVSLKELDFKIRQHLVKNYGLYKGTTKYKGITFNLKDGEKKEIDLGDKLQFE
SSL7_GL1      DSFLINKEEVSLKELDFKIRKQLVEKYGLYQGTSTKYKGITIILNGGKKQEBIDLGDKLQFE
SSL7_MW2      ESFLINKEEVSLKELDFKIRQHLVKNYGLYKGTTKYKGITFNLKDGEKQEBIDLGDKLQFE
SSL7_NCTC8325 DSFSINKEEVSLKELDFKIRQHLVKNYGLYKGTTKYKGITFNLKDGEKQEBIDLGDKLQFE
SSL7_Mu50     DSFLINKEEVSLKELDFKIRKQLVEKYGLYKGTTKYKGITINLKDEKKEVIDLGDKLQFE
SSL7_N315     DSFLINKEEVSLKELDFKIRKQLVEKYGLYKGTTKYKGITINLKDEKKEVIDLGDKLQFE
SSL7_NCTC6571 DSFLIQKEEISLKELDFKIRQQLVNNYGLYKGTSTKYKGIILNKDENKVEIDLGDKLQFE
                ;**~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*:~*

SSL7_GL10      HMGDVLNSKDIQNIATLTKQI
SSL7_GL1      RMGDVLNSKDIQNIATLTKQI
SSL7_MW2      HMGDVLNSKDIQNIATINQI
SSL7_NCTC8325 RMGDVLNSKDIQNIATLTKQI
SSL7_Mu50     RMGDVLNSKDIQNIATINQI
SSL7_N315     RMGDVLNSKDIQNIATINQI
SSL7_NCTC6571 RMGDVLNSKDIRGISVTINQI
                ;*****~*:~*:~*:~*:~*

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**B.**

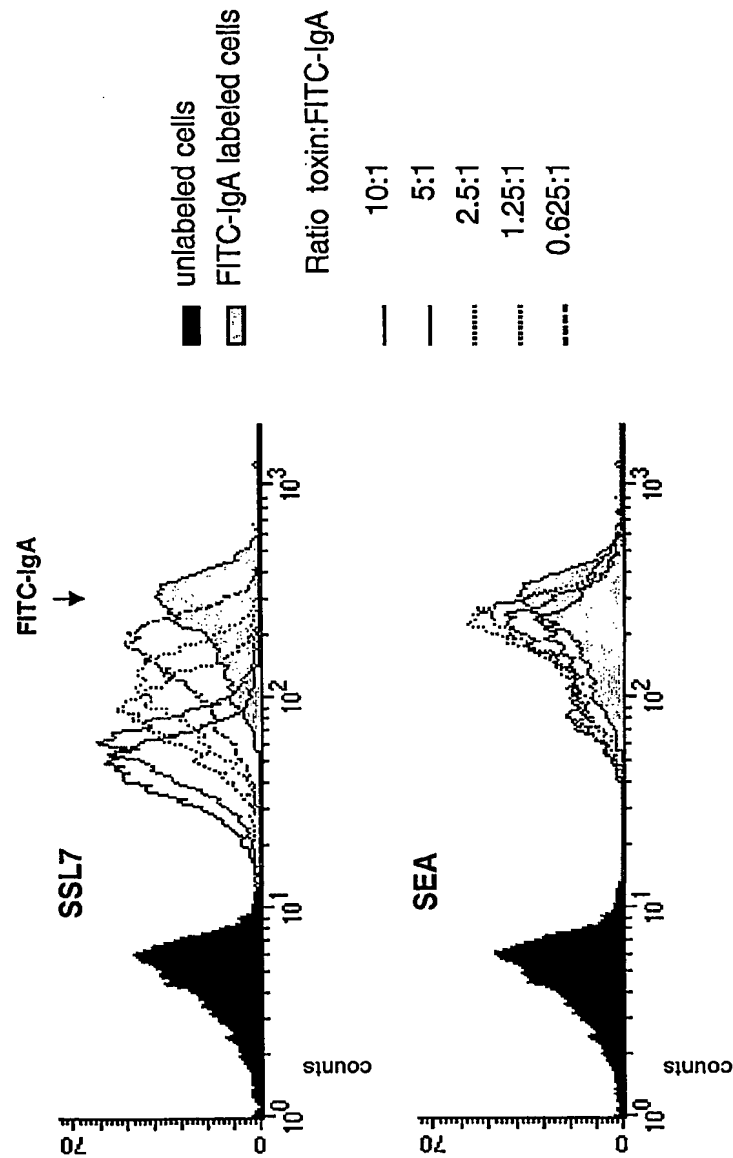


Figure 6

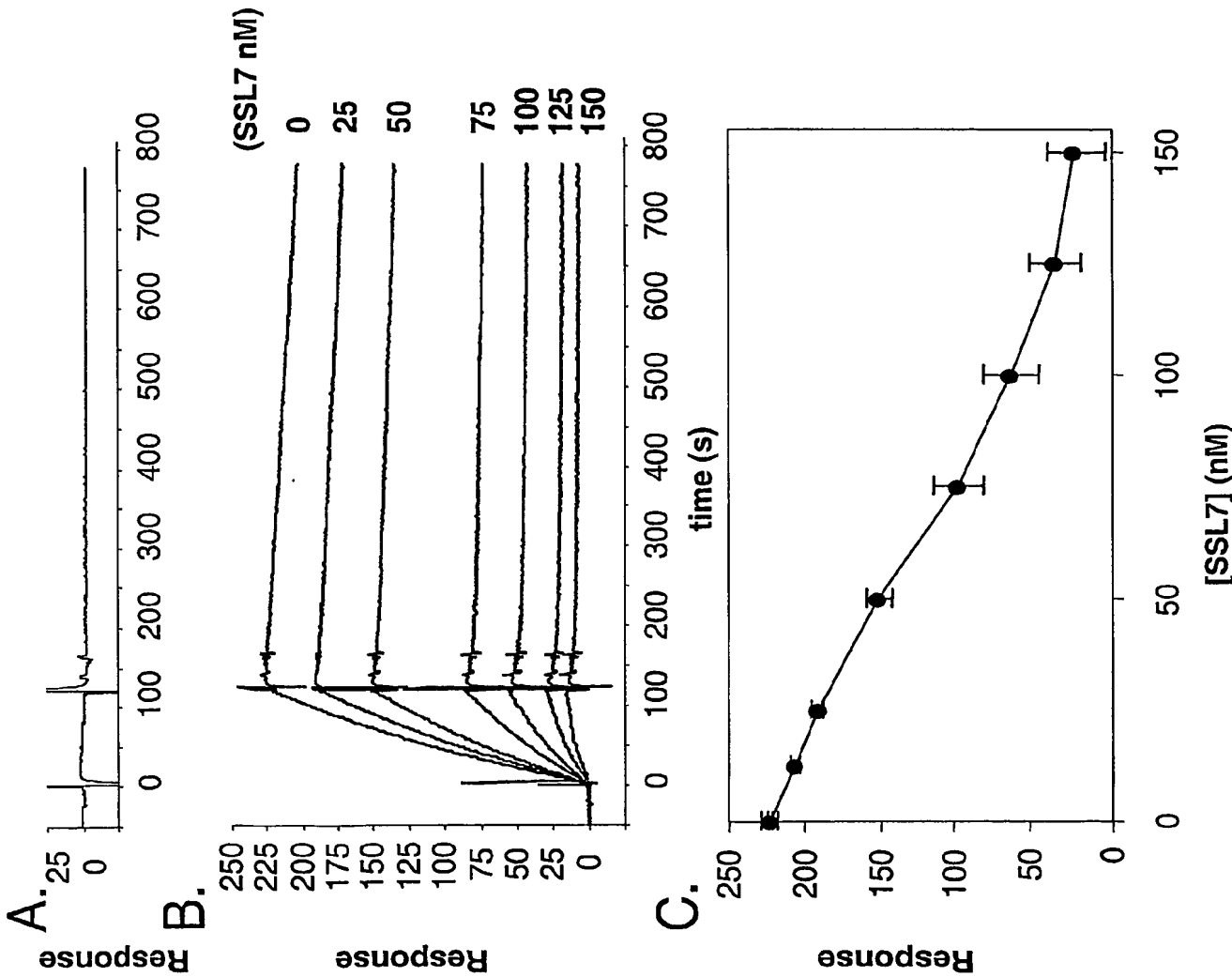


Figure 7

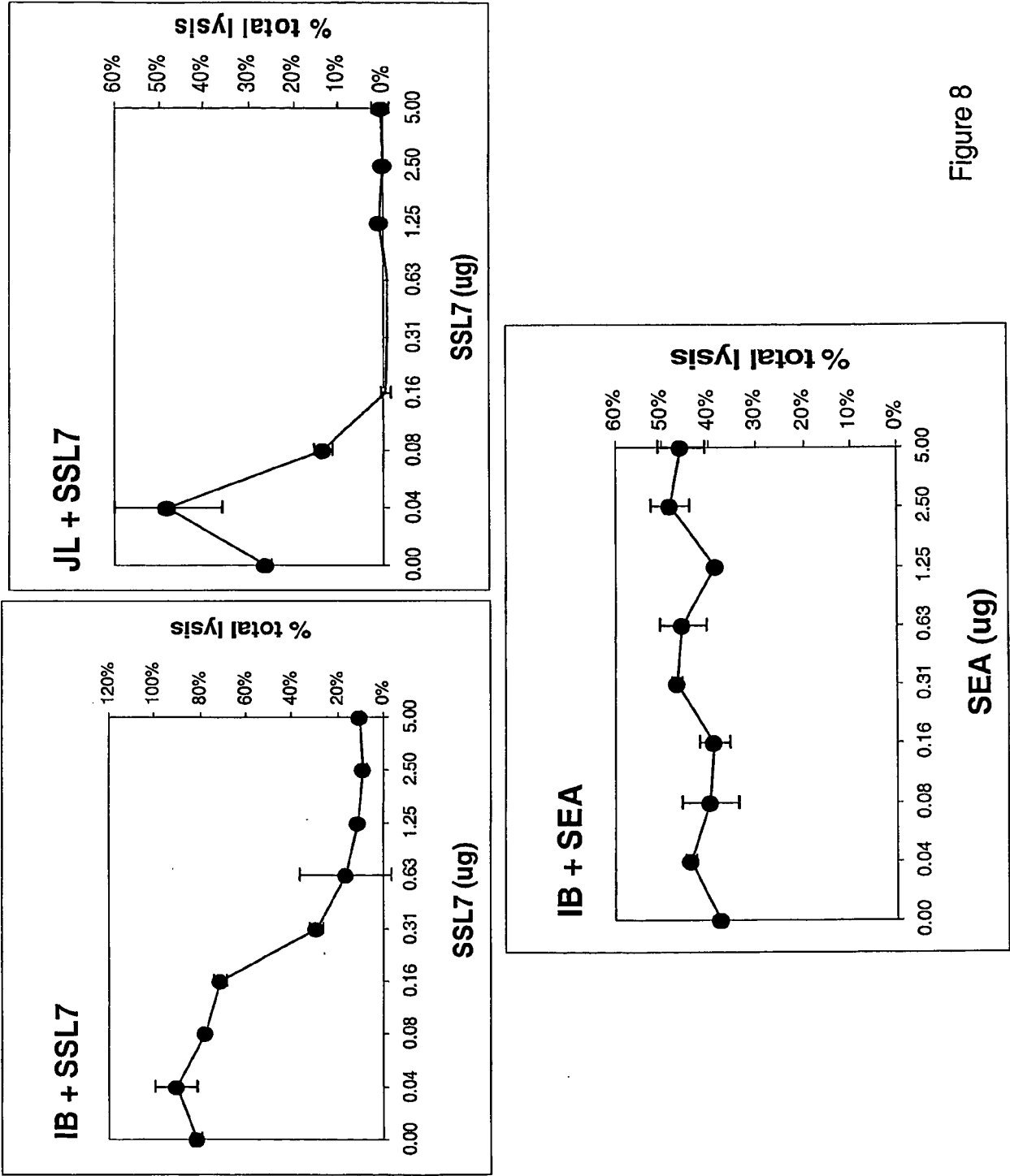
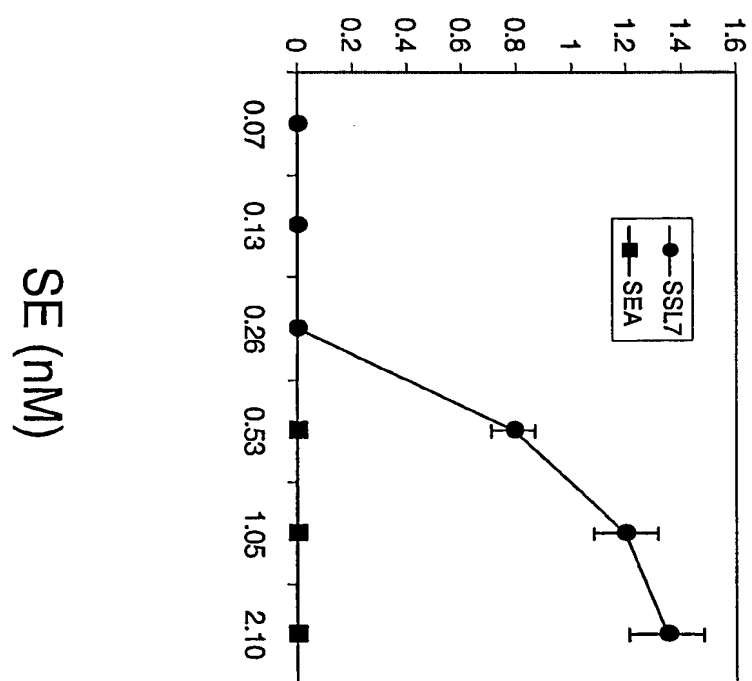


Figure 8



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Bacterial Survival (cfu x 10<sup>-6</sup>)

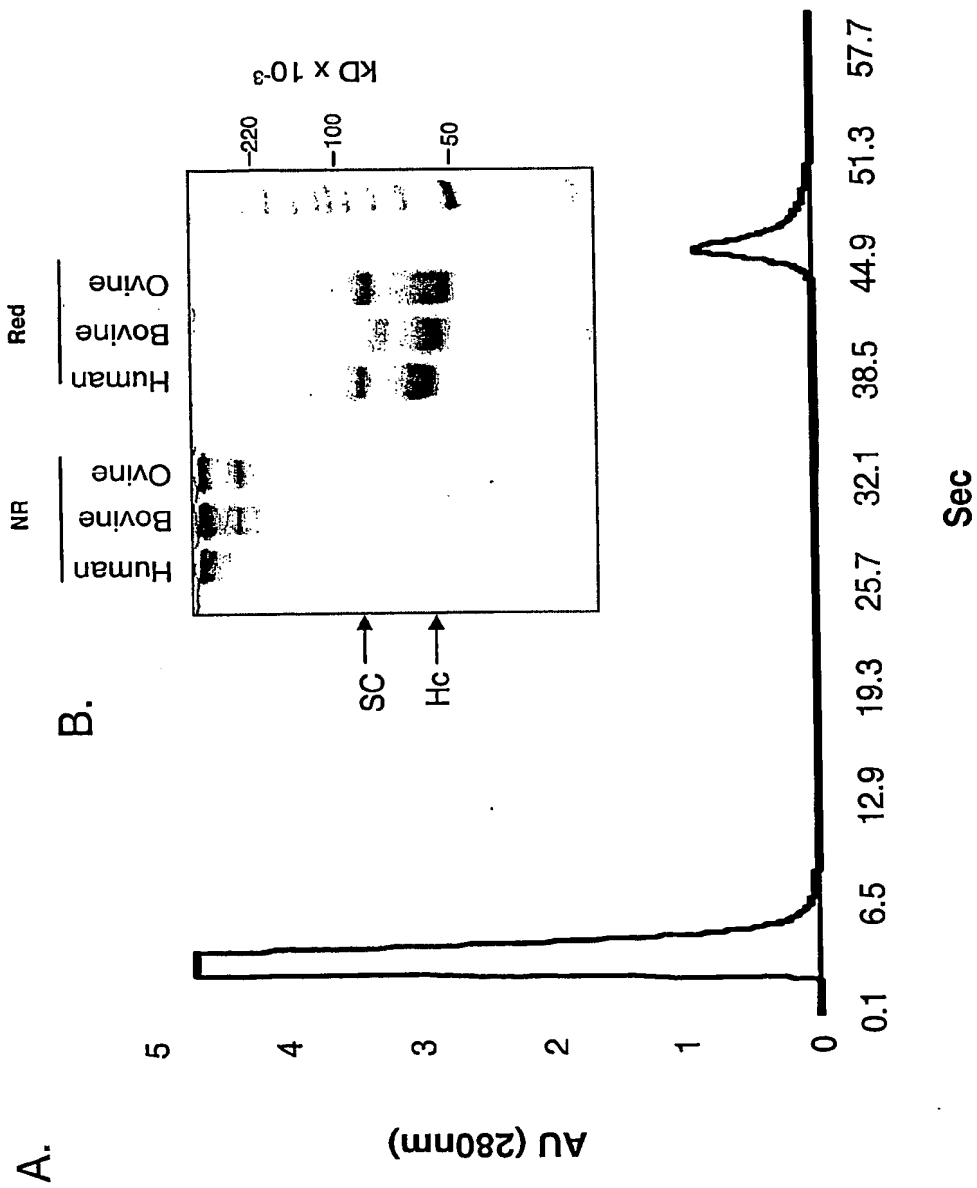


Figure 10